



# SnapServer® SAN S2000

## Quick Start Guide

### Overview

This document describes how to unpack an SnapServer SAN S2000 appliance from Overland Storage and install it into a four-post, 32-inch depth, EIA-310 rack.

**WARNING:** To reduce the risk of electric shock or damage to equipment, always remove any power cords while working with the unit.

**AVERTISSEMENT:** pour réduire le risque de choc électrique ou endommagement de l'équipement, retirez toujours les cordons électriques en travaillant avec l'appareil.

**CAUTION:** While working with the unit, observe standard Electrostatic Discharge (ESD) precautions to prevent damage to micro-circuitry or static-sensitive devices.

### Register First

Before starting, it is **essential** that you activate your Overland warranty. Technical and warranty support are **not available** until this is done:

1. Go to the **Overland Storage** web site (<http://www.overlandstorage.com/>).
2. Click the **Service & Support** tab.
3. Select **My Products** tab > **Register New Product**.
4. At the [Site Login](#), enter your **e-mail address** and **password** (Figure 1).

**NOTE:** If you are not yet a member, click "New member?" and follow the instructions given. It's free and easy!

E-mail:

Password:

☐ Remember Me

[GO >](#)

[Forgot your password?](#) [New member?](#)

Figure 1. Support Site Login

5. Fill in the information and click **Submit**.

Within three business days, you will receive an e-mail from Overland with your warranty certificate. Follow the instructions included to complete the process.

### Rack Installation

Before installing the disk drives, it is recommended that the unit first be secured in the rack.

**WARNING:** Use care during rack installation or removal to prevent accidental tipping of the rack causing damage or personal injury.

**AVERTISSEMENT:** soyez prudent lors de l'installation ou de l'enlèvement du support afin d'empêcher le renversement accidentel de la crémaillère, pour éviter dommages et blessures.

The rail kit included with the S2000 is adaptable for installation in the two major types of hardware racks: squared-holed and round-holed EIA-310 racks.

**NOTE:** A two-post telco-style rack or any rack that is less than 29-inches in depth will not support this appliance. Also, for threaded-hole racks, Overland Storage recommends using a shelf.

The rails are not universal. They are stamped LH (left) and RH (right) and must be mounted on the appropriate side (when facing the rack front).

### Attach Inner Rails to Chassis

This procedure is required for **all rack types**:

1. Mark the **screw holes** on the rack where the rails will be installed.
2. Remove the **inner rail** (Figure 2) from the rail set:

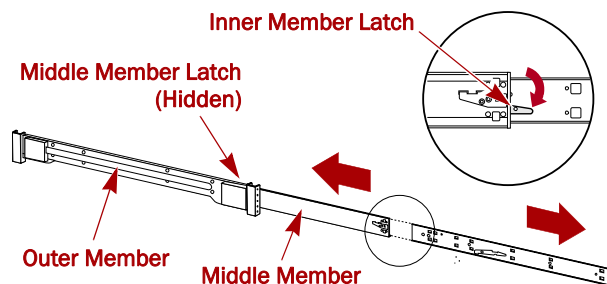


Figure 2. Inner Rail Release Latch

- a. Fully extend the rail set.
- b. Push the inner member **latch** down, and remove the **inner rail**.

- c. Release and slide the **middle member** back into the outer member.

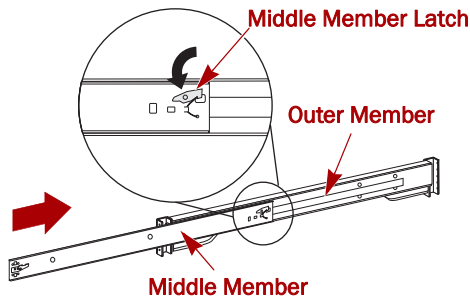


Figure 3. Inner Rail Release Latch

3. Attach the **right inner member** (Figure 4):

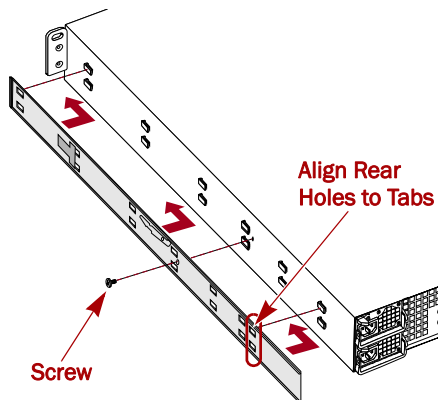


Figure 4. Attach Inner Rail Member to E2000

- a. Facing the chassis, position the **rail** against the right side of the appliance with the locking tabs going through the holes on the rail.
  - b. Slide the rail **toward the front** to lock it.  
This may require some force as it is a tight fit.
  - c. Secure the rail with its Phillips **screw**.
4. Repeat [Step 3](#) to install the **left inner member**.

**IMPORTANT:** Depending on your rack type, continue with either the [“Square-Holed Rack Installation”](#) or [“Round-Holed Rack Installation.”](#)

## Square-Holed Rack Installation

1. Attach the **left outer rail** to the rack ([Figure 5](#)):

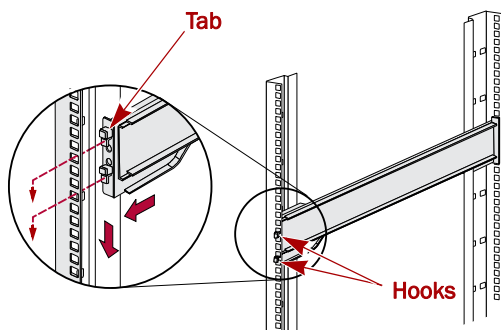


Figure 5. Attaching Front of Rail

- a. Position the **rail** against the inside of the rack front rail with the hooks in line with the holes.
- b. **Insert** the bracket front into the rack rail and **press down** so that the hooks catch.  
The spring-loaded tabs will extend into the hole to prevent the rail from unhooking.
- c. Slide the **rear segment** of the bracket rearward until the hooks are in line with the correct holes.
- d. **Insert** the bracket rear into the rack rail and **press down** so that the hooks catch and the tabs lock.

2. Repeat [Step 1](#) for the **right** slide rail assembly.
3. Verify that the **rails** are level and straight.

Continue with [“Install the Unit in the Rack”](#) on page 3.

## Round-Holed Rack Installation

Before installing the rails onto a unthreaded round-holed rack, the round-hole rail kit adaptors ([Figure 6](#)) must be installed on the ends of the outer rails.

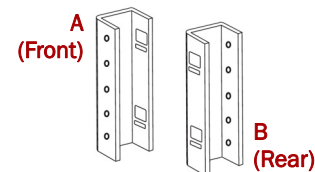


Figure 6. Round-Holed Rack Adaptors

1. Attach the **adaptors** ([Figure 7](#)) to both ends of the rail:

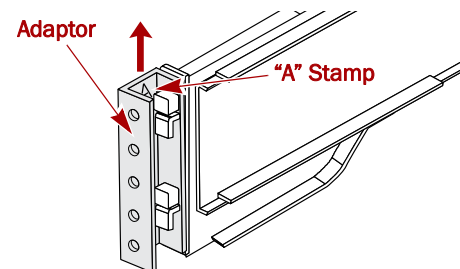


Figure 7. Attach the Adaptor to the Front

- a. Position the adaptor stamped “A” at the front of the **left outer rail** (end with the graphic label).

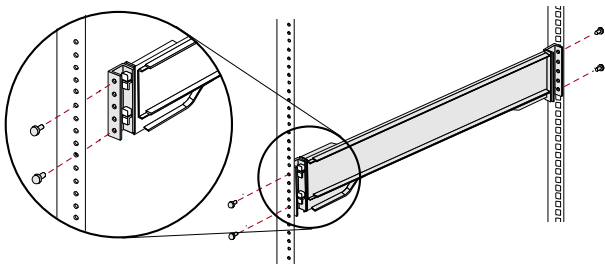
**NOTE:** Make sure the stamp is at the top and the square adaptor holes are aligned with the hooks on the outer rail.

- b. Press the **adaptor** onto the hooks and slide it **upwards** until it locks (clicks).

**NOTE:** The rail buttons will snap into the square holes.

- c. Repeat [Steps a–b](#) for the **left rear** adaptor (stamped “B”).

2. Facing the rack, position the **left rail** in the rack, aligning the adaptor holes with the **front** left rack holes being used ([Figure 8](#) on page 3).



**Figure 8. Using the Early Round-Hole Adaptors**

3. Using the **screws** from the kit, secure the **front** of the rail to the rack.
4. Slide the **rear rail segment** rearward until the **rear adaptor holes** are in line with holes being used.
5. Using the **screws** from the kit, secure the **rear** of the rail to the rack.
6. Repeat [Steps 1–5](#) for the **right rail**.
7. Verify that the **rails** are level and straight.

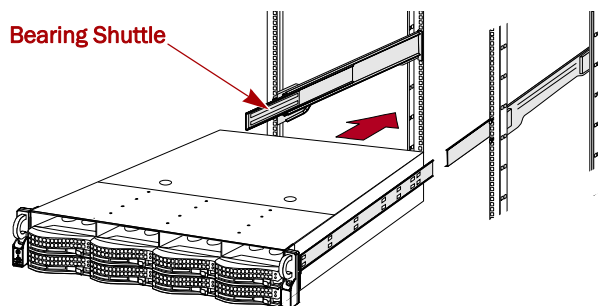
Continue the installation with “[Install the Unit in the Rack](#).”

## Install the Unit in the Rack

**WARNING:** It is recommended that a mechanical lifter (or at least two people) be used during rack installation or removal to prevent injury.

**AVERTISSEMENT:** pour éviter toute blessure il est recommandé qu'un monte-charge (ou deux personnes au moins) soit utilisé lors de l'installation ou de l'enlèvement du support.

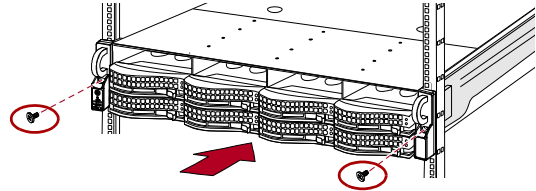
1. At the front, extend the **middle rail members** until they lock (click).
2. Confirm that the ball-bearing **shuttles** are at the front ([Figure 9](#)).



**Figure 9. Inserting Expansion Array Into Rack**

3. Using a mechanical lifter or two people, insert the **appliance** into the rack **rails**.  
Lift the appliance to its install height and engage the **inner members** on the appliance with the middle members protruding from the rack, and slide the appliance into the rack until it stops.

4. Slide the **unit** in and out a few times to ensure that the expansion array does not bind.  
If binding occurs, verify that the front and rear flanges are mounted in the correct holes, readjusting the slide positioning as necessary.
5. Using the **two screws** provided, secure the expansion array flanges to the rack ([Figure 10](#)).



**Figure 10. Secure the Expansion Array to Rack**

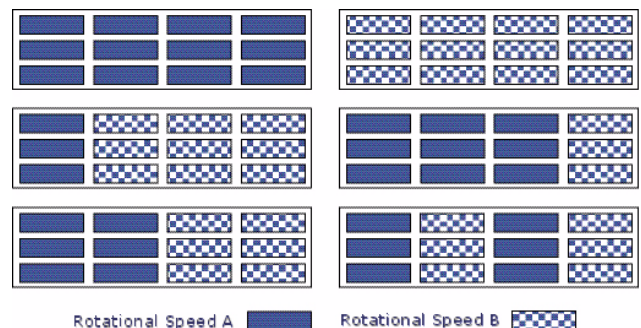
## Disk Drives

The S2000 comes without disk drives installed (they are sold separately in singles and 4-packs). A combination of 4 to 12 SAS and/or SATA drives can be installed with blank drive carriers filling in the empty slots.

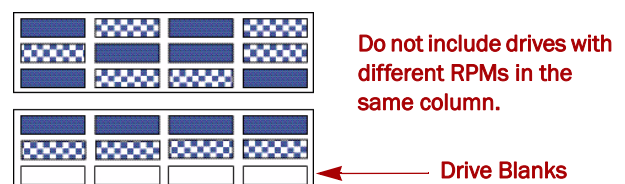
### Recommended Drive Configurations

Before installing or adding drives to a SAN S2000 server, the following must be observed:

- Different capacity drives can be installed; however, they should not be included in the same RAID array, because capacity usage for all drives in the RAID is limited to the capacity of the smallest drive member.
- Drives of different rotational speed (such as, SAS and SATA drives) can be installed ([Figure 11](#)), but they should not be installed in the same column or be separated from each other by a column of different rotational speed drives ([Figure 12](#)). If you are combining drives with different speeds, use the figures below to plan where to place the disk drives.



**Figure 11. Supported Drive Configurations**



**Figure 12. Unsupported Drive Configurations**

- Overland recommends grouping columns of drives of the same speed next to each other when possible.

## Installing Drives

**NOTE:** Do not remove the disk drives from their carriers. Doing so voids the drive warranty.

Once the unit is in the rack, install the drives. Initially, the top row is empty and the other two rows are filled with drive blanks. Remove as many blanks as needed:

1. If a **drive blank** is in the slot where you are about to install a disk drive, remove the blank by pressing the lever release button and pulling it out.
2. Remove a **drive assembly** from the packaging.
3. Press the **button** to release the lever.
4. With the button on the right, position the **drive assembly** in front of the appropriate **bay** and slide it in (Figure 13) until resistance is felt.

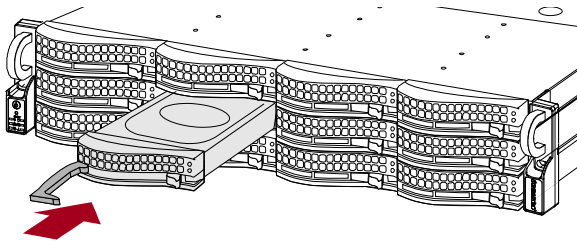


Figure 13. Inserting Drive Carriers

5. Push the **lever** in to lock the assembly in the bay.
6. Repeat Steps 1–5 for **each** remaining drive carriers.

**IMPORTANT:** To maintain proper airflow and cooling, a drive assembly or a blank drive carrier must be installed in every slot. No empty slots are allowed.

## Attach the Bezel

Once in the rack, attach the front bezel (Figure 14):

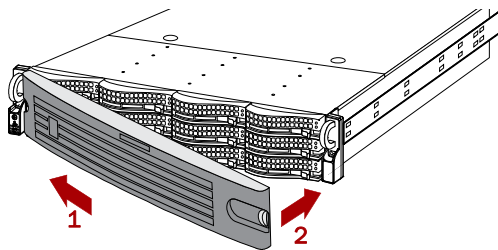


Figure 14. Attaching the Bezel

1. Insert the **bezel tabs** into the flange holes.
2. Push the **other side** in until it latches (clicks).
3. If desired, **lock** the bezel.

## Cable Attachment

All cabling and power connections are located on the rear panel of the SAN S2000 appliance (Figure 15). All unit cooling exhaust is handled through the rear panel.

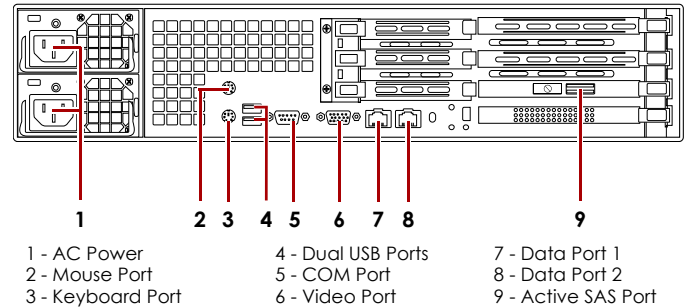


Figure 15. SAN S2000 Rear Panel Connections

1. Plug the **network connection** into Data Port 1.  
Using a Category 5e (or better) cable, connect **Data Port 1** on the appliance to a Gigabit Ethernet switch on the same LAN segment as the management system.
2. Attach the power cords to the **AC Power** sockets on back panel.
3. Plug the **power cords** into an UPS appliance or AC power source.
4. Make sure that a **iSCSI Initiator** and the **.NET (dot NET) framework** is installed on each Windows host before continuing.
5. Install the Windows **SAN Manager Suite** software from the supplied CD on a host computer attached to the same subnetwork.
  - If Autorun is enabled, program launches an HTML contents page where you select the appropriate type of software to load (32-bit or 64-bit).
  - If you are using a Mozilla-based browser or Autorun is disabled, you need to use your file manager to browse the CD and launch **start.html** at the root level.
6. Follow the on-screen **instructions**.

## Power Up the SAN S2000

**IMPORTANT:** Always turn on any EXP E2000 expansion units on before powering up your SAN S2000. This enables the head unit to discover the attached expansions.



To turn the appliance **ON**, press and hold the Power button (Figure 16) for no more than one (1) second to begin the power-up sequence.

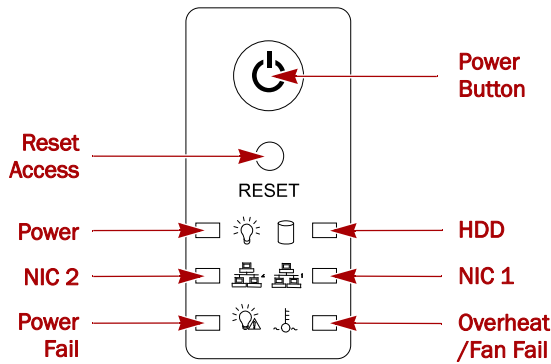


Figure 16. Front Panel Controls and Indicators

After you turn the power ON, the System performs a self-test process, which takes a few minutes.

You must leave the appliance ON while completing any configuration processes for your application and backup media servers.

1. At the host computer, launch the **Windows SAN Manager** by selecting Windows Start > All Programs > SnapServer SAN > SnapServer SAN Manager.

Automatically, Windows SAN Manager attempts to discover any new SAN S2000 appliances connected to the subnetwork and tries to connect to them.

2. If successful, Windows SAN Manager then opens the **SAN Appliance Setup Wizard** to guide you through the following setup process:

- a. At the **Before You Begin** page, click Next.
- b. At the **Licensing Agreement** page, read the terms, click the check box to indicate you accept the terms, and then click Next.
- c. At the **Identity** page, enter a new name if you want to rename the appliance, and click Next.

**NOTE:** We highly recommend changing the name to help identify the appliance on the network. The name must start with a letter; subsequent characters may be letters, numbers or hyphens. Try to keep the name short.

- d. At the **Password** page, you must enter a password for the appliance, confirm it, and click Next.



**IMPORTANT:** Overland recommends using a password of at least six alphanumeric characters.

- e. At the **Pool Creation** page, select the type of policy you want, and click Next. See the user guide for complete details.

**NOTE:** Select the *Don't Create Pool* option if you want to create multiple pools or to create a pool using only selected disks in the enclosure. Later, use Windows SAN Manager to create the desired pools.

- f. At the **Summary** page, click Close to accept your settings.

When the wizard finishes, the Windows SAN Manager Home screen is displayed.

## Configuration Information

At this point, your SAN S2000 is ready to be configured for your specific environment and needs. The Windows SAN Manager software provides easy access to the Overland storage systems on the network. You can also use the built-in SAN Web Manager to configure a specific appliance, even from a non-Windows system.

### Launching the SAN Web Manager

1. From a Web browser, enter the applicable **IP address** to access the SAN S2000.
2. Use the following default **login** (case-sensitive):  
User Name: **admin**  
Password: **password** (or new assigned password)  
The Web GUI appears.
3. Continue with the **configuration** process.

### Check for Software Updates

The latest release of the SAN S2000 software can be obtained from the Overland Storage FTP site:

1. Point your browser to  
<http://ftp.overlandstorage.com/Software/Snap>.
2. Open the appropriate **version folder**.
3. Download the **latest** software file based on the date.

For additional assistance, search at  
<http://support.overlandstorage.com/>.

## Special Notes

- The **alarm mute and disable** buttons can be found in different places:
  - In the **Windows SAN Manager**, they are found in the tasks list under Manage SnapServer SAN Pool.
  - In the **SAN Web Manager**, they are found by clicking the subsystem name (link) under Pools.
- To help identify a disk drive that is currently allocated as a Hot Spare, the **red LED blinks** on the front of its drive carrier. This blinking action also denotes that the Hot Spare is active and healthy.
- If your OS supports **MPIO**, you must install and enable MPIO with your iSCSI initiator.
- Replication and Mirroring are **optional features** that require additional licenses to activate.

## Additional Information

### User Guide

For detailed information on configuring your SAN S2000, refer to the *SnapServer SAN S2000 User Guide*.

It is **available online** at:

<http://support.overlandstorage.com/support/snapserver-san.htm>

### Warranty and Technical Support

For warranty and technical support information, see our [Contact Us](#) web page.

To search for more service information, visit our [Expert Knowledge Base System](#).

You can get additional technical support on the Internet at <http://support.overlandstorage.com>, or by contacting Overland Storage using the information found on the [Contact Us](#) page on our web site.